Learning Technologies Project Bulletin

Brought to you by NASA, BDM International, & West Virginia University

# News from NASA

## "Charting the Future" 1998 LTP Conference

The 1998 LTP Conference, "Charting the Future," will be hosted by the Gulf of Maine Aquarium in Portland, Maine. Please visit the 1998 LTP Conference announcement page on the Developers' Workshop at **http://developers.ivv.nasa.gov/ltpconf/9806/** for hotel information and the latest postings of the agenda, program, registration information, and project requirements for the conference.

A Web-based registration form will be online by the end of March. You will be informed of its availability via the announce mailing list.

The conference hotel is the Holiday Inn By the Bay (**http://www.innbythebay.com/**). The deadline for hotel reservations is Friday, May 8.

**Conference Highlights**

Sessions will be held to discuss lessons learned, the new LTP solicitation, metrics, and evaluation. Guest speakers for the conference will be Hon. Angus King, Jr., Governor of Maine, and Elliot Soloway, Digital Library Initiative, University of Michigan.

*Monday, June 1* — NASA centers and once-IITA PIs meet. Morning tour of Fairchild Microchip Factory and DeLorme Mapping Co.; Virtual Reality demonstration by Dr. Bowen Loftin, JSC/University of Houston. Evening reception (wine and cheese will be served) featuring a slide presentation by Bill Curtsinger, freelance photographer.

*Tuesday, June 2* — Ferry ride to Great Diamond Island for parallel, mutually exclusive sessions for NASA centers and once-IITA PIs. "Farewell to IITA banquet" at the Holiday Inn after a ferry trip through Casco Bay on the return journey from Great Diamond Island.

*Wednesday, June 3* — NASA centers meet at University of Southern Maine for hands-on project training. Departure of once-IITA PIs.

General questions may be sent to **workshop@rspac.ivv.nasa.gov**.

# News Bytes

## Lewis Research Center Promoting NASA Educational Internet Sites through Interactive Distance Learning

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Now that many schools have access to the Internet as well as videoconferencing equipment, the NASA Lewis Research Center LTP is promoting the use of NASA educational Internet sites in the science classroom through videoconferencing workshops. The videoconferences allow the LTP workshops to reach a larger audience via travel over communication lines rather than over highways. Since November, LTP workshops have served over 25 teachers in three workshops.

The NASA educational Internet site workshops, which are taught by Lewis LTP Webmaster Carol Galica, are tailored to the grade levels of the science teachers who register. Instruction includes where to find NASA, online interactive projects and exercises, and ideas on how teachers can use them to enhance their science curricula. Computers with live access to the Internet are required within the participants' videoconferencing facilities. One computer is required for each two participants, and participants should have previous experience with a Web browser.

For more information or to schedule a workshop, check the LTP Web site at **http://www.lerc.nasa.gov/WWW/K-12/CoE/COEmain.html**, or contact the authors at the e-mail addresses listed above.

## The Debate Has Begun! PTK's Backyard Biodiversity Survey Is Launched

Eileen Bendixsen
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The debate has begun! The Passport to Knowledge Backyard Biodiversity Survey debate, that is. Students are working with researchers from the Biological Dynamics of Forest Fragments Project in Manusus, Brazil, to design a biodiversity survey which they can conduct in their neighborhoods. The collaborative activity is one of the high

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# Nothin' but Net

### New in JavaShop: Pie Charts and Line Graphs

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If your monthly report needs a little spicing up or your Web site could use some more visuals, consider adding pie charts or line graphs—now free and easy, courtesy of RSPAC's JavaShop.

Developed by Remote Sensing Public Access Center programmers Ian Straub and John Hinkle, these newest additions to JavaShop are located in the Developers' Workshop and are available to all NASA's Learning Technologies Project groups.

The pie chart program is located online at **http://developers.ivv.nasa.gov/tech/javashop/chartgraph/index.html**.

The line graph program can be found at **http://developers.ivv.nasa.gov/tech/javashop/linegraph/index.html**.

"These tools are perfect for any project that needs to display information in a concise and attractive way," said Hinkle. "After information is entered—values and points, for instance—these tools will generate either a pie chart or a line graph, your choice, to graphically illustrate the data."

This bulletin will also be available in Adobe Acrobat format on the Developers' Workshop Web site at **http://developers.ivv.nasa.gov/collab/pubs/bulletin/**

# In the Spotlight

### Telescopes In Education Great Learning Tool for Students Worldwide

Lori L. Paul
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The Telescopes In Education (TIE) project offers the opportunity to use a remotely controlled telescope and charge-coupled device (CCD) camera in a real-time, hands-on, interactive environment to students around the world. The science-grade, 24-inch reflecting telescope (located at the Mount Wilson Observatory in the San Gabriel Mountains of Southern California) can be operated remotely by educators and students from the convenience of a computer in the classroom. Images of galaxies, nebulae, and other celestial objects can be downloaded to a remote user of the telescope in five minutes or less.

These images can be stored in the user's computer for later enhancement and study. Use of the TIE system is without charge, except for the purchase of "The Sky: Remote Astronomy Software," which controls the telescope. The software also serves as an excellent stand-alone educational astronomy program.

TIE enables students in grades K-12 to increase their knowledge of astronomy, astrophysics, and mathematics, improve their computer literacy, and strengthen their critical thinking skills. Middle school students using the TIE system have assisted the Pluto Express mission at NASA's Jet Propulsion Laboratory. Others have discovered an uncataloged variable star, and students at several schools have taken stunning images of several comets, the Horsehead Nebula, and the supernova in the M51 galaxy. TIE makes astronomical observations and research possible for children of all ages, with a special ability to serve inner city, rural, and physically disabled students. TIE's Web site is located online at **http://tie.jpl.nasa.gov**.

# News Bytes (cont.)

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points of every PTK module because it provides students with an opportunity to work with researchers as mentors, and to collect real data with real-world value.

In a discussion carried out online, students will debate how to conduct their surveys. Guided by researchers and teachers, they will be the actual designers of the surveys. Since the debate is conducted using its own mailing list, it gives students a forum in which to discuss and share the results of their surveys. Once the data have been collected, the PTK staff will challenge the students to use the collected data in a meaningful way. The students who participate in this activity will be showcased on the April 21 live broadcast "Connect Globally, Act Locally."

If you would like to be on the LTP Bulletin mailing list, please send e-mail to Scott Gillespie at: sgillespie@rspac.ivv.nasa.gov, or write to: BDM/RSPAC, 100 University Drive, Fairmont, WV 26554. Phone: (304) 367-8324, fax: (304) 367-8211.

# News Bytes (cont.)

## Three LTP Projects Named Finalists in National Education Awards Competition

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Three projects within NASA's Learning Technologies Project (LTP) have been named finalists in the third annual Global Information Infrastructure Education Awards.

The University of Michigan's "Windows to the Universe" project, NASA's Ames Research Center's "Live From Mars: An Extraterrestrial Electronic Field Trip," and "Quest: Connecting Classrooms to NASA People" were named among the six finalists in the education category.

"Windows to the Universe" is located online at **http://www.windows.umich.edu**. It is a Web site which focuses on the Earth and space sciences, with related art and cultural information.

"Live From Mars" encourages students to interact with the women and men of NASA's Pathfinder and Surveyor missions and simulate their research, "hands-on, minds-on," in class. It is located on the Internet at **http://quest.arc.nasa.gov/lfm**.

"Quest" can be found online at **http://quest.arc.nasa.gov**. This project allows students and teachers to meet enthusiastic NASA people online in a way that can be scaled to serve tens of thousands of schools.

The winner will be announced on Monday, April 20, at a ceremony in Chicago. Interested persons may visit the Finalist Publicity Resource page at **http://www.gii.com/final_publicity.html**.

## Upcoming CU-SeeMe Videoconferences

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Several "Ask the Scientist" CU-SeeMe videoconferences are planned from Rice University. Use reflector 128.42.249.172 (or 198.64.198.250). Colloquiums are sometimes broadcast in COLOR only. Send a message via the chat window if you can't see one and it will be changed to gray, or you can download the latest version of enhanced CU-SeeMe!

*March 25, 1 - 2 p.m. CST* "Asteroid XF-11" (Suitable for all ages.) Videoconference online with popular Dr. Magneto (Sten Odenwald), who receives many e-mailed questions per month and archives the answers! (**http://bolero.gsfc.nasa.gov/~odenwald/ask/askmag.html)** He will discuss the recent calculations of the orbit of asteroid XF-11, whose projected near pass in 2028 recently caused a great deal of public interest.

*March 29, 11 - 11:30 a.m. CST* "CU-SeeMe Demo" (Suitable for all ages.) Interact with teachers at the Tennessee Technology conference. (If you are interested in a one-to-one conference with them, send e-mail to Barbara Garnett at garnettb@tennash.ten.k12.tn.us.

As always, use the chat window to ask questions. The speaker's comments will be summarized there for folks with low-bandwidth connections. (If "talk" or "chat" doesn't show up on your menu bar, download the most recent CU-SeeMe software from Cornell or WhitePine.)

These videoconferences are a part of the "Public Connection," which is funded by NASA's DLT program. For more information about our program and its hot links, see **http://space.rice.edu/** or **http://spaceupdate.com**.

# Highlights & Happenings

## MCET Improves Web Site, Begins Final "Take Off!" Kits

Francesca Casella
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The Massachusetts Corporation for Educational Telecommunications (MCET) had a busy February as it modified its Web site and began work on the final video kit.

*The Web Site*

An outline of the work for the Web site was developed by the team:

* The front page will be slightly modified to improve visibility of the title and reduce overcrowding. It will also feature information on sponsors and partnerships.

* The navigation bar on the left frame, the main navigation feature, will inform users of their position within the site by highlighting the corresponding interactive button. The left frame will also include hyperlinks to "Timeline" and "Notables...", the two cross-linked subsections of the History page that cannot currently be accessed individually through the main navigation utility.

* The Career Cards segment will feature four additional cards, new navigation buttons (graphic and text-based), restoration of links to audio files and transcripts, and expanded bios for career representatives.

Work on the Web site will be completed in March.

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# Highlights & Happenings **(cont.)**

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*The Final Take Off! Kit*

Work is under way on the production of the final video kit. Dr. Shelley Canright, of NASA's Langley Research Center, has offered to assist in the development of the kit, and the production team sincerely welcomes her aboard. Sidney Storey will be the producer of the video series. Sidney and the project director have carefully reviewed the tapes and scripts of the first two student broadcasts from both Take Off! series, analyzing strengths and weaknesses and identifying materials that can be used with minimal modifications, those that need substantial rearrangement, and those that are no longer fit for inclusion in a video-based product. The same approach will be followed for all the units.

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